PRODUCTION OF ARYLPYRIDINE DERIVATIVE

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Abstract of **JP2001081074**

PROBLEM TO BE SOLVED: To produce an arylpyridine derivative useful as an intermediate for medicines and agrochemicals by reacting a specific chloropyridine derivative with specified arylboronic acids and/or a specific arylboronic acid anhydride in the presence of a polymer-supported palladium catalyst and a base in a mixed solvent of an organic solvent with water. SOLUTION: One mol of a chloropyridine derivative represented by formula I (R1 is H, a 1-6C alkyl or the like) is reacted with arylboronic acids represented by formula II (R2 is H, a 1-6C alkyl or the like; Y is OH, a 1-6C alkoxy or the like) in an amount of preferably 1-1.3 mol and/or an arylboronic acid anhydride represented by formula III in an amount of preferably 0.33-0.43 mol in the presence of a polymer-supported palladium catalyst prepared from dichloro(1,5-cyclooctadiene)palladium and polystyrene-methyldiphenylphosphine and a base in a mixed solvent of an organic solvent in an amount of preferably 50-3,000 pts.wt. based on 100 pts.wt. of the compound represented by formula I with water in an amount of preferably 5-1,500 pts.wt. based on 100 pts.wt. of the compound represented by formula I at 60-100 deg.C for 2-24 h to thereby produce the objective compound represented by formula IV.